

Part I: EMS System Review

EMS Levy Mid-point Review: Major Themes and Ongoing Challenges

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The year 2004 represents the end of the third year of the current six-year EMS levy that started in January 2002 and will end in December 2007. At this mid-point year, it is very useful to present a broad overview of the major issues and future challenges that remain for regional planning, EMS operations and service, and financial management in the current EMS levy cycle. It also presents an opportunity to begin to anticipate and discuss some of the regional themes emerging for the next EMS levy in 2008.

EMS Strategic Plan

The EMS strategic planning process was the result of events that occurred prior to and immediately after the EMS Levy failure in 1997. The *2002-2007 EMS Strategic Plan Update*, the most current version, was a product of regional consensus and policy guidance by elected officials, fire department staff in cities and fire districts, physicians, and King County, on a number of broad directions the EMS system should take during the levy period. It established goals and specific initiatives designed to make an already effective EMS system more efficient and cost-effective.

The EMS Strategic Plan emerged from the regional planning process as a document that set out the major policy directions and initiatives for the regional EMS system, and it has been successful in defining and implementing those directions. The plan set new challenges, established important new initiatives, provided funding formulas linked to Consumer Price Index, and anticipated essential paramedic service needs. The EMS Strategic Plan established an EMS Advisory Committee, a representative group which has been very effective in serving as a forum for system review, program updates, and ongoing decision-making regarding EMS programs and policies. The plan was historic in providing detailed policies and guidelines, yet included built-in flexibility in program implementation.

The EMS Strategic Plan identified five critical, integrated components of the regional EMS system, including:

- Paramedic (Advanced Life Support) service
- Basic Life Support first response by fire departments and districts
- Regional Programs and Services managed by the EMS Division
- Strategic Initiatives designed to accomplish four major goals:
 - Manage the rate of growth in calls, particularly paramedic responses
 - Use existing resources more efficiently
 - Enhance existing programs and add new ones to meet community needs
 - Develop an EMS Advisory Committee

- A six-year financial plan for the EMS levy funds that support these major activities and provides for planned service increases over the course of the levy period

It is helpful to review this matrix of elements supported by the levy, including the primary strategic initiatives, and to identify current issues and challenges for the future.

Paramedic Services

The current EMS strategic and financial plans provide for both the maintenance of existing paramedic services as well as the potential addition of new paramedic service during the remaining years of the current levy period. This potential ensures that the addition of new paramedic services will keep pace with the growth in workload, lengthening paramedic unit response times, and other paramedic service and operational factors. Paramedic services are the regional priority in the EMS Strategic Plan, and the EMS Financial Plan aims to fully support these services.

Per the *2002 EMS Strategic Plan Update*, funding for paramedic services increases annually by the regional Consumer Price Index (CPI), however, there are built-in review mechanisms for modest increases above CPI based on paramedic provider needs, as can be accommodated within existing levy funds. The primary purpose of this increase is to avoid or minimize - to the extent possible - cost shifting to paramedic providers. One such increase occurred in 2003 and small paramedic allocation increases are anticipated for 2005 and 2006, all provided within the limitations of the EMS Financial Plan.

Due to the failure of the EMS levy in 1997, no ALS units were added between 1999 and 2001. Consistent with the *2002 EMS Strategic Plan Update*, ALS units have been added during the first three years of the 2002-2007 levy period. They included a new 12-hour (0.5 allocation) unit in Shoreline (2002), and the expansion of existing 12-hour units to 24-hour service in Bothell (2002), Issaquah (2003), and southeast King County (2004). Funding for Vashon was also increased to a 0.5 allocation beginning in 2002.

The *2002 EMS Strategic Plan Update* also forecasts the need for an additional 0.5 paramedic unit in 2006 in South King County, if warranted. A detailed study - based on specific data and performance measures around workload, response times, unit backup, and other factors - will be completed in 2005 to determine if this service is needed in 2006 or 2007, and if warranted, where the unit should be deployed to be most effective. This study will also review potential service requirements in light of the success in managing growth in paramedic calls achieved through the safe and effective changes in paramedic dispatch guidelines. This study will be conducted over the next several months by a representative regional study group, and recommendations will be taken to the EMS Advisory Committee for review and approval. The findings and any recommendations for service will be included in the EMS Division's 2006 Budget Proposal.

Since the EMS Strategic Plan was last updated, the Regional EMS Medical Directors and the EMS Advisory Committee recommended the conversion of EMT-Paramedic (EMT-P) units, staffed by one paramedic and one emergency medical technician, to units staffed by two

paramedics. Two EMT-P units were originally put in place, one in North Bend and the other in Woodinville, as a way of improving paramedic service in outlying areas of the county. No specific funding for the conversion of this service was included in the updated Strategic Plan as it was originally thought that these units would remain in their current staffing model through the end of the current levy period. However, through a cooperative effort between the Bellevue Fire Department, Eastside Fire & Rescue, and the EMS Division, the North Bend unit has been converted to a two paramedic-staffing model. There are also plans to convert the Woodinville EMT-P unit to two paramedic staffing in 2006, if possible, and discussions to achieve this goal are underway.

There is ongoing regional discussion about increasing the level of paramedic service funding in outlying rural areas. A proposal to fund supplemental winter paramedic service in Fire District #50 (Skykomish area) was uniformly not supported by the EMS Medical Directors and the EMS Advisory Committee. A systematic review of potential grant sources is currently being conducted, however, to assist in locating support for enhanced rural paramedic service. This funding source review may also help identify other grant sources to help support other unanticipated emergency medical services in the region.

In summary, ALS demands on the EMS system continue to grow in ways not anticipated in the financial projections of the *2002 EMS Strategic Plan Update*. The most financially challenging of these are the conversion of the two units staffed by one paramedic and one EMT, as recommended by the EMS Medical Program Directors and the EMS Advisory Committee. In addition, costs for existing services – especially in areas of salaries, benefits, pharmaceuticals, and medical supplies and equipment, indirect costs, and others - continue to increase at a rate higher than the local CPI. This suggests that additional means of anticipating these increases should be discussed as part of the next EMS levy.

Basic Life Support Services (BLS)

The EMS levy supports a portion of BLS first response activities provided by 34 fire departments and fire districts in King County. Most of the cost for providing this service is supported by local tax dollars. In urban or suburban areas, levy support represents approximately 10 per cent or less of the cost to provide local fire department EMS response. In more outlying areas, levy support may represent a much more substantial percentage of the cost to provide EMS services.

The overall BLS allocation increases annually by local CPI, and is then distributed between fire departments based on a formula that includes assessed valuation of property and the number of calls. The formula also includes a mechanism for increasing the amount of funding available to small outlying departments. This formula shift, recommended by the BLS Subcommittee and approved by the EMS Advisory Committee, represents a strong regional statement of support for maintaining and protecting EMS services in outlying, largely volunteer, departments.

A primary issue in the allocation of BLS funds has been the concentrated effort to reduce the ‘hold harmless’ amounts allocated to fire departments. ‘Hold harmless’ is the policy that has

been sustained over many EMS levies of holding BLS allocations of individual departments at the previous year's level to prevent allocations from any year to year reductions. The amount necessary to ensure that this occurs is deducted from other departments on a proportional basis. Early in the current levy period, it became apparent that unless some changes were made to the formula, most growth in BLS allocations would be distributed as 'hold harmless' amounts and potentially limiting any growth in the BLS allocations. This issue was identified early on in this levy period and formula changes, approved in advance by the EMS Advisory Committee, have made it possible to gradually reduce the negative impacts of the hold harmless policy and allow allocation increases in areas where growth is occurring. Based on annual review of these trends by the BLS Subcommittee, it appears that that trend of reducing 'hold harmless' will continue through the remainder of this levy period.

Fire departments, paramedic providers, and other public safety agencies have been heavily impacted by voter-approved legislation designed to limit tax growth. As a result, fire departments are reviewing a wide spectrum of efficiencies and potential revenue-producing alternatives. These include discussions regarding shared administrative functions, potential agency consolidations, and charging fees for patient transports. These issues will continue to be important discussions through the remainder of this levy and will influence strategies for the next EMS levy in 2008.

Regional Programs and Strategic Initiatives

Regional Programs and Services, provided by the EMS Division, represent an extremely rich and varied set of activities and includes specific research or evaluation activities supported by grants as well as levy-supported programs. Per the *2002 EMS Strategic Plan Update*, funding for these programs and services is increased annually by local CPI. The richness and variety of these programs is described in detail in Part II: Status of EMS Division Programs and Activities (pages 18-45). However, below are some notable highlights and themes:

- There is increased reliance on technology-based programs to conduct EMS business in King County. For example, the continuing education program for the more than 4,000 EMTs in the region, also known as Competency Based Training, is now conducted using a highly interactive, realistic web-based program. This project was initiated in 2001 with grant support from the Medic One Foundation. While this web-based approach does not cover all training requirements - especially hands-on practical skills - it offers a substantial improvement over historical approaches to continuing education and is being reviewed for potential marketing beyond King County. Emphasis on technology-based learning in dispatch training, paramedic continuing education, and data collection is very likely to be a strong part of EMS in the future (see page 23).
- The Regional Purchasing Program continues to provide a cost-saving approach to purchasing medical equipment and supplies. One of the first strategic initiatives to be implemented, this program is now a regular regional program. Since April 1999, it is estimated that this program has saved EMS agencies nearly \$1,000,000 (see page 36).

- Emergency Medical Dispatch has been one of the most critical components for strategic initiative and program development during this levy. In this regional system, emergency medical dispatchers play a very critical role in determining when paramedic units are sent, and in referring minor, non-urgent calls to a nurse referral line. Although there have been changes and improvements in training and continuing education, careful changes in dispatch criteria have resulted in strong and appropriate management of paramedic responses. It is very significant that paramedic call volumes in this region have decreased over the past three years while population continues to increase, due in large part to the safe changes in dispatch criteria (see page 22).
- When the *1998-2003 EMS Strategic Plan* was drafted, it was difficult to accurately or uniformly describe EMS activities or depict trends across the entire region. Some questions posed by the planning committee could only be partially answered. The Regional Electronic Data Collection Project, initially started five years ago as a strategic initiative, created a system to collect and distribute EMS data electronically across the county. There are currently sixteen departments representing about 70% of EMS incidents per year, and it is anticipated that nineteen agencies reporting over 80% of EMS incidents will be in this system by the end of 2004 (see page 24).
- Critical Incident Stress Management (CISM) has been providing support and debriefings to emergency services workers for more than 15 years. Largely volunteer, members of this team donate their time to respond to incidents. It is indicative of the spirit of this group that when challenged by issues regarding validity of CISM itself, they voluntarily carried out a scientific assessment of their activities and strengthened the program (see page 40).
- Grant-funded research and evaluation activities continue to be a strong part of both the EMS Division's and the region's activities thanks to the close association of the EMS Division with the University of Washington and Harborview Medical Center. The results of the Heart Attack Survival Kit (HASK) indicate that utilizing EMS personnel to assist in providing public information may be a very effective model for favorably influencing behavior in seniors and helping them call 911 when experiencing chest pain (see page 42).

In summary, the EMS Division manages a variety of innovative programs to further the effectiveness and efficiency of EMS responses in King County. The EMS Strategic Plans have offered exceptional regional direction in targeting specific areas for improvement and developing a financial plan to forecast the impacts of changes in expenditures and revenues. This is complemented by the outstanding scientific research conducted within the EMS Division. At this halfway point through the levy period, excellent progress has been made in implementing the identified strategic initiatives and adequate funds have been reserved to meet the identified commitments for the second half of the levy.

2008 Levy Planning

Although we are only halfway through the current levy, discussions are already underway to initiate the early steps in the planning process for the next EMS levy in 2008. Given that the

current EMS Strategic Plan has proven to be so successful as a regional policy directive, it is anticipated that a broad regional process will be implemented again. We expect that the process will require about one-and-a-half to two years to complete, and will again include a wide range of elected officials, physicians, fire department and paramedic provider leaders, and citizen and labor representatives. This discussion will again be a mechanism for reviewing our EMS system, providing an opportunity to review our accomplishments, and building a strong future direction.

There are already a number of important themes that may appear in these regional discussions, even though their final resolution is not entirely clear. Some of the themes may include:

- How long should the next EMS levy last? Historically, EMS levies in King County have been approved for six years. State law now allows longer EMS levies, including a permanent levy.
- If we have a longer levy, will it be useful to have some type of regional EMS governance structure to ensure regional input, participation, and oversight? The EMS Advisory Committee currently fulfills that regional role.
- How many cities over 50,000 will be needed to approve the levy? Current state law requires that all cities over 50,000 in population and the King County Council must approve the levy in order for it to appear on the ballot countywide. In 2001, there were six cities over 50,000. The King County Annual Growth Report indicates that there could be seven cities, or possibly nine cities over 50,000 by 2008, depending on population growth and annexations.
- Are there other sources of revenue for support of EMS activities? In 1999, a detailed financial evaluation of twelve potential revenue sources was carried out in order to review the feasibility of other options. The EMS levy emerged from this review as the most financially practical way of supporting regional services.
- The EMS levy has historically supported nearly all of the costs of providing paramedic services and EMS regional support services, and a portion of BLS costs for fire departments. In the *2002 EMS Strategic Plan Update*, strategic initiatives were added to increase the efficiency and cost-effectiveness of EMS services, and to manage the growth in responses. These initiatives have been very successful. What new directions can this region take to continue to build on the successful regional medical model?
- How do we plan for increased workloads and services in more remote, rural areas? Some of these efforts may include cross-county planning along major highways like Highway 2, Interstate 90, and Highway 12, where current services are provided by largely volunteer departments with limited resources.

- Should we increase the BLS funding level in the EMS levy? How many new paramedic units will we need in the future? What support should be provided to regional support programs, and how do we prioritize those?
- What will be the impact of emerging illnesses such as West Nile Virus, as well as ongoing all-hazards emergency management, and continuing challenges in Homeland Security preparation. These issues imply a closer relationship with Public Health. Should that be included in the EMS levy planning?

These are just a few of the major questions that will emerge in the next few years as we begin the regional discussion in preparation for the next levy period. It will require a countywide effort and consensus to provide the answers in ways that maintain the successful regional EMS system we now enjoy and also benefits EMS patients.

Summary

The past three years have seen substantial progress in the challenges that were set out in the original EMS Strategic Plan. The initial set of strategic initiatives have been completed and implemented, and this achievement has been a regional success. There has been additional regional consensus regarding new strategic initiatives that will continue the progress we have made so far. At the same time, we have been able to work effectively as a region in addressing new issues that were not anticipated in the *2002 EMS Strategic Plan Update*. We are gradually seeing the emergence of issues that will guide the discussion regarding the next EMS levy and the next phase of regional planning and service delivery.